

SOURCE FOLLOWER WITH RAIL-TO-RAIL VOLTAGE SWING

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ABSTRACT

A source follower can include a primary driving device that is limited by its threshold voltage as well as a secondary driving device that is not limited by its threshold voltage, thereby allowing the secondary driving device to drive the output voltage fully to the desired voltage rail. This secondary driving device can be activated substantially at the same time the primary driving device is reaching its maximum voltage transfer, thereby ensuring a linear output voltage transfer. This source follower can be implemented in an amplifier. This amplifier, which can output true rail-to-rail voltages, can advantageously provide optimal performance, particularly in low power applications.